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REMARKS

No claims have been amended, added or canceled. Hence, claims 1 – 24, 26 – 35, and 38 – 43 are pending in the application. Claims 1 – 24 and 26 – 35 have been allowed.

Summary of Rejections

Claims 38-43 were rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 38-43 were rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter.

Claims 38-40 were rejected under 35 U.S.C. 103(a) as being unpatentable over (US 5,907,847) Goldberg in view of (US 6,374,252) Althoff et al, hereinafter Althoff.

Claim 41 was rejected under 35 U.S.C. 103(a) as being unpatentable over Althoff in view of (US 5,600,005) Hoover et al, hereinafter Hoover.

Claims 42-43 were rejected under 35 U.S.C. 103(a) as being unpatentable over Althoff and Hoover in view of Goldberg.

Rejection Under 35 USC § 112

The Office Action alleges that claim 38-43 are unpatentable as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The fact that a method claim refers to, for example, a database server as claim 38 does, does not suggest that the claim is combining two separate statutory classes of invention in a single claim. Rather, the addition of “database server” in method claim 38 acts as clarification and a limitation as to which object is performing the action.

Also, the fact that method claim 41 refers to steps of a method occurring “in response to executing a query” does not imply that claim 41 is combining two separate statutory

classes of inventions in a single claim. The reference to “executing a query” does not render the claim indefinite for failing to particularly point out and distinctly claim the subject matter when it is clear from the preamble (“a method for”) and from the steps outlined therein that the claim is a method claim.

Rejection Under 35 USC § 101

As discussed above, claims 38-43 do not overlap two different statutory classes of invention and therefore claims 38-43 satisfy 35 U.S.C. § 101.

Claim 38

Claim 38, recites:

A method for deriving object ids for data in a table that is managed by a database server and is defined by a table definition, comprising:
maintaining, separate from the table definition, metadata that indicates how to derive
object ids from values stored in the table; and
the database server deriving object ids for the data in the table based on the metadata.

Claim 38 has been rejected as being unpatentable over Goldberg in view of Althoff. Concerning the arguments made in the discussion of claim 38 and Goldberg in the previous office action response, the current Office Action did not respond to those arguments. The arguments thus remain applicable and are outlined again below.

Goldberg describes a system for storing, for a set of objects, class definitions and state and behavior in the same source, i.e. a single database. (Abstract, col. 6, lines 1 – 25). One table (or a relation of multiple tables) holds class definitions and behaviors for objects. (i.e. table 404, col. 6, lines 41 – 45) Another table holds data for the objects (employee table 412, col. 6, lines 53- 55).

Althoff describes a method and system for modeling object-oriented database structures, translation to relational database structures, and performing searches thereon. (Abstract).

The Office Action has rejected claim 38 based on the allegation: (1) that Goldberg discloses the step of "maintaining, separate from the table definition, metadata that indicates how to derive object ids from values stored in the table" and (2) that Althoff teaches "the database server deriving object ids for the data in the table based on the metadata." There is no basis for these allegations.

Goldberg mentions absolutely nothing of object ids or deriving object ids. Therefore, Goldberg cannot possibly disclose anything about how metadata is used to derive object ids, much less how such metadata is separately maintained as claimed.

Althoff does not suggest or disclose that object ids are derived based on metadata. Therefore, Althoff cannot possibly disclose anything about how metadata is used by a database server to derive object ids for data in a table.

Specifically, the Office Action cites Althoff at col. 7 lines 36-45, col. 12 lines 59-63, and col. 23 line 43, as teaching "the database server deriving object ids for the data in the table based on the metadata." Col. 7, lines 36-45 simply describes Figure 2 which "shows a block diagram of a system for modeling of object-oriented database structures and translation to relational database structures" (col. 6, lines 39-41). Nothing in the cited paragraph mentions anything about object ids or meta-data (Althoff uses "meta-model" in other parts of the description), much less a "database server deriving object ids...based on metadata," as claimed.

The other two sections of Althoff that the Office Action cites read:

When the user 201 creates a derived class 101, or alters the base/derived status of a class 101, the system 200 creates or edits an object of class Class Link 302 to model the base/derived relationship (col. 12 lines 59-63).

The “object type” column indicates whether this particular object (as opposed to an entire class) is part of the meta-model, or is an object created by the user (col. 23, lines 41-42).

Though the term “meta-model” is mentioned in the last section, neither object ids, or deriving object ids is referred to anywhere. Thus, the cited sections of Althoff could not possibly teach or disclose “the database serve deriving object ids...based on the metadata,” as claimed.

Therefore, it would not have been obvious to one having ordinary skill in the art at the time the invention was made to modify Goldberg in view of Althoff’s teachings because the cited art, alone and in combination, fails to teach what the Office Action alleges.

Based on the foregoing, claim 38 is patentable.

Claim 41

Claim 41 recites:

A method for presenting data from a set of one or more tables in a database, the method comprising the steps of:

in response to executing a query that references an object view as if the object view were a table, performing the steps of:

reading data from one or more rows of the set of one or more tables indicated by metadata that defines said object view, the object view defining a presentation of data as a set of objects that reside in said database, the set of one or more tables including at least one relational table; and accessing said data from one or more rows as a set of objects that reside in said database.

Claim 41 has been rejected as being unpatentable over Althoff in view of Hoover.

Althoff describes a method and system for modeling object-oriented database structures, translation to relational database structures, and performing searches thereon. (Abstract).

Hoover describes a system and methods for transforming data stored in a plurality of remote, heterogeneous, object-relational databases into a homogeneous data model (Abstract).

The Office Action has rejected claim 41 based on the allegation that Althoff teaches a “method for presenting data from a set of one or more tables in a database, the method comprising the steps of: in response to executing *a query that references an object view as if the object view were a table.*” There is no basis for this allegation.

Claim 41 requires that the step of reading data from a table, indicated by metadata that defines an object view, is performed in response to executing a query that references the object view as if the object view were a table. An example of such a query is found in the application on page 18, as follows:

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Select REF(OV_FEMPLOYEE) From OV_FEMPLOYEE
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“The preceding SQL statement represents a query specifying the return of references to the objects presented by object view OV_FEMPLOYEE” (page 18).

The Office Action cites col. 29 lines 3-67 and col. 30 lines 1-52 of Althoff as teaching “the method for presenting data from a set of one or more tables in a database, the method comprising the steps of: in response to executing *a query that references an object view as if the object view were a table.*” Col. 29, lines 3-67 and col. 30, lines 1-52 describe a portion of “a process for cascade searching of an object database and search translation between object-oriented and relational database structures” (col. 24, lines 34-36). Specifically, the section cited refers to how a system generates SQL commands by determining what columns will be selected, what tables will be joined, and what conditions must be satisfied.

This cited section of Althoff contains nothing that relates to a view, much less queries that reference views, nor does any other section of Althoff teach such features. Thus, Althoff cannot possibly disclose anything about presenting data from a set of one or more tables in a

database in response to executing a query, *where the query references an object view as if the object view were a table.*

Therefore, it could not have been obvious to one having ordinary skill in the art at the time the invention was made to modify Althoff in view of Hoover's teachings because Althoff does not teach what the Office Action alleges.

Based on the foregoing, claim 41 is patentable.

Unallowed Pending Claims

The unallowed pending claims not discussed so far are dependant claims that depend on an independent claim that is discussed above. Because each of the dependant claims include the limitations of claims upon which they depend, the dependant claims are patentable for at least those reasons the claims upon which the dependant claims depend are patentable. Removal of the rejections with respect to the dependant claims and allowance of the dependant claims is respectfully requested. In addition, the dependent claims introduce additional limitations that independently render them patentable. Due to the fundamental difference already identified, a separate discussion of those limitations is not included at this time.


It is respectfully requested that the Examiner reconsider all of the pending claims, which are now in condition for allowance. Therefore, the issuance of a formal Notice of Allowance is believed next in order, and that action is most earnestly solicited.

The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.

Respectfully submitted,

HICKMAN PALERMO TRUONG & BECKER LLP

Dated: June 23, 2004



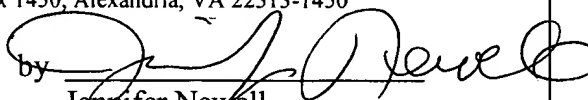
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on June 23 2004

by 
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